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ON THE COMPARATIVE LIABILITY

OF

MALES AND FEMALES TO INSANITY,

AND THEIR COMPARATIVE

CURABILITY AND MORTALITY WHEN INSANE.

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ON THE COMPARATIVE LIABILITY OF MALES AND FEMALES TO INSANITY, AND THEIR COMPARATIVE CURABILITY AND MORTAL- ITY WHEN INSANE.

I. THE COMPARATIVE LIABILITY OF MALES AND FEMALES TO INSANITY.

In regard to the comparative liability of males and females to lunacy, there have been but few thorough, and no extensive, investigations, and fewer records of reliable facts. Some authors have given opinions, and they are men whose opinions are not to be lightly questioned, but they, as well as we, have reason to complain of the want of satisfactory data to found their opinions upon.

Pinel says, that there are twice as many female as *malê* lunatics in France.

Spurzheim says, in general terms, "there are more women than men liable to insanity." *

Esquirol, that authority above all others in these matters, says, "that women are more exposed to mental maladies than men," † yet, in another page, he says, "mania is more frequent in males than females." ‡ But their relative liability differs in different ages and differ-

* On Insanity, p. 102. † *Maladies Mentales*, i. p. 584. ‡ *Ibid.* ii. p. 138.

ent places, for he says, "that it is now true that, in Greece and Italy, females are less subject to madness (*folie*) than males. But in the north of France the contrary is the fact, for there are more female than male lunatics."*

But in England, he says, this is reversed, and the male lunatics are the most numerous. This he ascribes to the better education of females in England than in France, by which the women of England are protected from some of the causes of lunacy that affect women in France.

Unfortunately all our data which should show the number of lunatics among all the people, or the proportion of lunatics in the two sexes, are of a secondary nature. I have been able to find an accurate census of the lunatics of the distinct sexes † of only one nation, and that is the report of the commission of Lunacy to the Minister of Justice of Belgium, of the number of lunatics in that kingdom. There were males 2,744, females 2,361, in the year 1835, ‡ which shows an excess of about 16 per cent of the males over the females.

Even the Metropolitan Commissioners of Lunacy of Great Britain have only reported those lunatics which were in hospitals and work-houses, and under commission. The paupers are probably reported accurately, but the private patients who are at their houses, or in private families are not reported.

* *Maladies Mentales*, i. p. 39.

† The admirable report upon Lunatics in France, in the "*Statistique de la France*," published by the French Government from official and reliable investigations, states the number of Lunatics in each Department, and each hospital, and place of refuge; but, unfortunately, it does not discriminate the sexes, so that the facts of that report are unavailable for our present purpose.

‡ *Rapport de la Commission pour l'Amelioration de la condition des Alienes*, en Belgique, p. 4.

According to their report, * there were in England and Wales, January 1st, 1844,

TABLE I.

Condition of Patients.	Males.	Females.	Total.
Private or self-supporting, }	2,161	1,911	4,072
Paupers,	7,701	9,120	16,821
Both classes,	9,862	11,031	20,893

These Commissioners seemed to have made no enquiry in the private families of the prosperous. This statement, therefore, as it does not include the self supporting patients who are not in Asylums, cannot be taken as a representation of all the lunatics of England and Wales.

Esquirol says, that there were in Norway, 995 male and 895 female lunatics; and in Paris, 6,156 males and 6,713 females insane. †

Almost the whole of our data for determining the number of insane in any community or nation, or in either sex, are limited to the observation of Hospitals, and these show, not the whole number of lunatics in any population, but only the numbers who have been sent to their care for cure or for custody.

For want of any accurate census of lunatics among the people at large, Esquirol collected the records of many Hospitals, and ascertained, that there were and had been confined in these during various periods, but equal for both sexes, 38,701 females and 37,825 males, showing a proportion of about 38 female and 37 male lunatics, which, he inferred, was about the proportion in which this disorder affected the two sexes. ‡

* Page 194.

† Annales d'Hygiène, iv. p. 351.

‡ Ibid.

I have now collected the Reports of 159 Hospitals and licensed establishments, public and private for the insane in England and Wales, 8 in Scotland, 12 in Ireland, 37 in Belgium, 11 in France, 2 in Germany, 20 in the United States, and 1 in Canada,—250 in all, which for various periods, but equal for both sexes, have reported the numbers of male and female lunatics admitted. In the Reports of Great Britain and Ireland the re-admissions are not included; but as no exception of this nature is made in regard to the Hospitals of other nations, it is probable that the re-admissions are included.

The number and sexes of the patients admitted in these 250 Hospitals and establishments are shown in the three following tables:—

TABLE II.
*Male and Female Patients admitted into American Hospitals.**

Hospital or Asylum.	Location.	Time of record.	Patients admitted		Males for 100 Fem.
			Males.	Fem.	
Massachusetts State,	Worcester,	1833 to 1849	1,707	1,650	
McLean,	Somerville, Mass.	1818 to 1849	1,661	1,371	
City,	Boston, Mass.	1839 to 1849	313	298	
Maine State,	Augusta,	1840 to 1849	474	394	
N. Hampshire State,	Concord,	1842 to 1849	274	273	
Vermont,	Brattleboro',	1846 to 1849	309	315	
Connecticut,	Hartford,	1824 to 1849	942	955	
Bloomington,	Bloomington, N.Y.	1821 to 1849	1,221	853	
New York State,	Utica,	1844 to 1849	1,209	1,167	
New Jersey State,	Trenton,	1848	47	39	
Pennsylvania,	Philadelphia,	1841 to 1849	889	710	
Friend's,	Frankford, Pa.,	1818 to 1849	547	525	
Maryland,	Baltimore,	1839 to 1849	623	446	
Virginia East. State,	Williamsburgh,	1836 to 1849	650	384	
Virginia West. State,	Staunton,	1836 to 1849	410	266	
Louisiana State,	Jackson,	1848, 1849	73	57	
Tennessee State,	Nashville,	1844 to 1849	215	101	
Kentucky State,	Lexington,	1824 to 1849	1,020	482	
Indiana State,	Indianapolis,	1849	51	53	
Ohio State,	Columbus,	1839 to 1849	716	649	
Temp. Asylum,	Beaumont, Canada,	1845 to 1848	122	112	
Twenty-one Asylums,			13,473	11,100	121

* Condensed from the annual reports of these Institutions.

TABLE III.

*Classification of the Asylums in England and Wales.**

No.	Classes of Asylums.	Patients admitted.		Total
		Males.	Females.	
15	County Asylums erected under Acts 48 Geo. III. and 9 Geo. IV.,	9,684	8,976	18,660
2	Asylums made by local Acts, 9 Geo. IV.,	248	293	546
2	Military and Naval Asylums, Chatham and Gosport,	1,286	22	1,308
2	Bethlem and St. Luke's, London,	7,894	11,559	19,453
10	Public Asylums, wholly or partly supported by charity,	4,215	3,331	7,546
30	Metropolitan, licensed to receive private patients,	1,314	953	2,267
3	Do. private and pauper,	2,998	3,065	6,063
51	Provincial, licensed to receive private patients,	2,756	2,061	4,817
44	Do. private and pauper,	5,277	4,645	9,922
159		35,672	34,910	70,582

TABLE IV.

Male and Female Patients admitted into Hospitals.

Nation.	No. of Hosp.	Patients admitted.		Males for 100 Females.
		Males.	Females.	
American, †	21	13,473	11,100	121
English and Welsh, †	159	35,672	34,910	102
Scottish, †	8	2,832	2,429	116
Irish, †	12	6,213	5,752	108
Belgian, §	37	1,338	1,436	93
French,	11	4,737	4,295	114
German, ¶	2	521	320	160
	250	64,786	60,242	107

These 250 Institutions for the insane received 125,028 patients; of whom 64,786 were males, and 60,242 were

* Condensed from the separate Appendix to the report of the Metropolitan Commissioners in Lunacy. Folio 1844. The number of patients received in the Hospitals of Hanwell, Suffolk, and Lincoln, in one year, 1844, are added from the reports of those Institutions.

† Annual reports.

‡ Statistical Tables of the report of the Metropolitan Commissioners.

§ Rapport de la Commission chargée par M. le Ministre de La Justice, de proposer un plan pour l'amélioration de la condition des Aliénés en Belgique. Folio. Bruxelles: 1842.

| Esquirol, *Maladies Mentales*, ii.

¶ Esquirol and Jacobi, p. 296.

females. This reverses the proportion given by Esquirol, and shows a preponderance of males.

We have no means of determining what proportion of all the lunatics in these several countries respectively, the lunatics in their Hospitals represent, nor, whether both sexes are represented equally or unequally, except in Belgium. In that nation there were 2,744 male and 2,361 female lunatics,* but of these only 1,338 males and 1,436 females were in the Hospitals. This shows a larger proportion of the females than of the males in the institutions devoted to their use, being 60 per cent. of the women and only 48 per cent. of the men who were insane throughout all Belgium.

If the same proportion of the lunatics of each sex is sent to the insane establishments in other countries as in Belgium, this would afford a means of calculating their true numbers, and the proportions of male and female lunatics. Thus, if in America, the numbers 13,473 males and 11,100 females admitted into the insane Asylums represent 48 per cent. of the former and 60 per cent. of the latter, at the several periods for which these are reported to be in the Asylums, then the true proportion of lunatics will be as 28,068 males to 18,500 females, or about 151 of the former to 100 of the latter. In Great Britain and Ireland the proportions will be as 93,168 males to 71,801 females, or as 129 to 100; and in France as 129 male to 100 female lunatics.

But leaving out this calculation, and supposing that the proportion of the insane of both sexes are truly represented in the Hospitals, we must yet compare these with the numbers of either sex from which they come.

In estimating the comparative liability of the sexes to insanity, it is not enough to compare the numbers of the

* Rapport de la condition des Alienes, en Belgique, p. 4.

male with the female lunatics ; but we should compare the proportion which the insane of one sex bear to the whole numbers of that sex, who are subject to this disorder, with a similar proportion in the other sex. In all established countries which are not peopled, in whole or in part, by recent immigration, there are more females than males, in all ages beyond childhood.

Almost all the cases of insanity occur after the age of 20. The proportion of those who become insane, previous to this period, is so small, that it may be left out of the calculation.

According to the last census there were in Great Britain and Ireland 6,724,079 males, and 7,309,264 females, above 20 years of age. If the sexes have borne the same proportion during all the periods from which the Hospital reports are taken, then the proportionate liability to insanity, so far as can be determined by the admissions into insane Asylums, will not be in the apparent proportion of 44,717 males to 43,091 females, but in the true proportion of 6,652 male lunatics to 5,894 female lunatics sent to these Hospitals out of a million of persons of each sex over 20 years of age, throughout the whole Kingdom ; or in the ratio of 100 females to 112 males.

In the 15 States of this country, from whose Hospitals the sexes are separately reported, and included in this calculation, there were in 1840, according to the national census, 2,687,274 males, and 2,581,062 females, over 20 years of age. Then the true proportion of the different sexes, contributed to the lunatic Hospitals, is not as 13,351 males to 10,988 females, the numbers actually received ; but as 4,957 males to 4,257 females from every million persons of each sex over 20 years old ; or as 100 females to 115 males, which is a difference in favor of

women, somewhat greater than that in Great Britain and Ireland.

In Belgium, according to the census of 1846, there were, over 20 years of age, 1,266,232 males, and 1,280,922 females. The whole number of lunatics in the nation was, 2,744 males, and 2,361 females, and of these 1,338 males and 1,436 females were in the Hospitals, which gives in a million of each sex of the liable age, 2,167 male and 1,843 female lunatics in the nation, and 1,056 males and 1,121 females in the Hospitals. Or, the whole amount of lunacy is as 116 males to 100 females; and lunatics under care in Hospitals are as 94 males to 100 females.

From this review of the facts which I have been able to obtain, we find that the proportion of males and females received into lunatic Asylums is not the same in all countries. The males predominate in the Asylums of America, England, Scotland, Ireland, and France, and among the people of Belgium. The females predominate in the Asylums of Belgium, among the people of Norway and of Paris, and among the paupers of England and Wales.

According to the estimates of authors, there is a similar variety of prevalence in various countries.

So far then as is known, we may conclude, that though it seems probable that males are more liable to insanity than females, yet this is not a universal fact in all places and in all ages.

In considering the relative liability of the two sexes to insanity, it would seem reasonable first to inquire into their respective anatomy and physiology, but here we look in vain for light; for those works that treat upon these subjects, even those which are devoted exclusively to the description of the brain and its functions, make no

distinction, in this respect, between males and females. They all describe the brain as one and the same in both. We can infer nothing from the anatomical structure, or the healthy action of this organ, as to the relative liability of either sex to lesion or functional disorder.

Anatomy and physiology, which make no revelation as to any inequality of the powers of the brain in the different sexes, are equally silent as to any difference in the amount of labor or suffering which either will bear, or of the burden under which either will falter.

Seeing then that there is no structural or functional difference of brain of the two sexes, which should lead us to suppose that there is any difference in their liability to mental derangement, we may next look to their temperament, their character, or position, which have no relation to their cerebral functions, and see whether there is any thing in these which lead to insanity in one sex more than in the other.

The temperament of females is more ardent, and more frequently nervous than that of the males. Women are more under the influence of the feelings and emotions, while men are more under the government of the intellect. Men have stronger passions and more powerful appetites and propensities. Women are more hopeful and confiding, especially in what regards the affections, but they are less given to sensual indulgence. Men are more cautious in regard to matters of a social nature. But in regard to the affairs that affect the intellect, they are more bold and less cautious. Their intellectual functions are oftener exercised without reference to the power of the physical organ. Their inclinations and propensities, of whatever nature, intellectual, moral, or physical, are more powerful and uncontrollable, and they are more likely to over-work and disturb the brain than women.

Women are more calm and patient, they endure difficulties and afflictions better than men, who are more uneasy and impatient under trial. It is said, and with truth, that women sooner yield, but being elastic recover again, while men being more firm, resist longer, and then break without power to rise again as readily as females do, when they are cast down.

The position of women exposes them less to many of the causes of insanity, such as some of the varieties and changes in life and fortune, accidents and injuries.

The difference of education and tastes, as well as of the habits and temperaments of the two sexes, concur also in producing a difference in exposure to many of the causes of mental disturbance.

The character of insanity is not one and the same in all persons. It is very various in its origin, its development, its progress, and its result in different individuals. It may arise out of a lesion of the brain, or merely a functional disturbance. There may be a structural change, as a softening or tumor, or watery effusion in this organ, or a growth of bone, or perhaps a malformation of the skull which produces pressure on its contents. Or there may be merely a derangement of function from excessive or wayward mental action or emotions connected with no organic change. This is the most common condition of insanity.

Functional derangement may be produced by some cause which does not act directly on the brain, but through some sympathetic irritation from a disturbance in other and even remote organs.

Among the prolific sources of the last description are the derangements of the stomach and the bowels, including all the nutritive functions, the irritations of the excretory organs, the urinary apparatus, the skin, and the lungs, and

also some diseases, fevers, measles, inflammations, &c. These are common to both sexes; but all the various and manifold derangements of the reproductive system, peculiar to females, add to their causes of mental disorder.

It will readily be supposed, that these causes of insanity are very numerous. The treatises upon this disease speak of its causes as many. The reports of lunatic Hospitals are intended to state all the circumstances, conditions, habits, or events, that seem to the physician, or are supposed by the friends of the patients, to be the real causes of their lunacy. The reports of the Bloomingdale Hospital mention 85 causes; those of the Western Virginia Hospital mention 75 causes; those of the Utica New York Hospital, 65; those of the Pennsylvania Hospital, 34; and all the reports of all the lunatic Hospitals of the United States mention 181 different causes of insanity.

The reports of some Hospitals reduce these causes to classes, of which 8 are reported from the Hospital at Worcester, Mass., 9 from the Hospital at Columbus, Ohio. The British Hospital reports state fewer causes than the American. The report of the Metropolitan Commissioners of Lunacy give from 8 to 16 causes for each Hospital, beside a class termed physical causes. This class, in those reports, usually includes epilepsy, palsy, injuries, and sometimes hysteria, and even puerperal mania, which, however, are sometimes stated separately.

Yet these causes of insanity, many as they are, even the 181 of the American reports, are capable of still further sub-division; and if they were reduced to their simple elements, they would be almost as numerous and various as the unkindly influences that can be brought to act on mankind. The term ill-health, as a cause of insanity, may be divided into almost the whole range of the nosology.

There may be error in these statements of causes in re-

gard to some patients. Some of these supposed causes may have been pre-existing, or even merely co-existing facts, rather than productive causes. And possibly some of them may have been the result of the diseased action, and the first manifestation or a part of the insanity. Yet, making all due allowance for the mistakes of friends or the misjudgment of physicians too eager to find causes, it may be assumed, that most of these facts or conditions had some, if not the principal influence, in the production of the mental disturbance.

Whatever truth or error there may be in this imputation of causes, it is the same for both sexes, and they are probably as correct for males as for females. And whatever deduction is to be made from, or discredit thrown upon, one, may with equal justice be imputed to the other. It is safe, therefore, to suppose, that the influence of these several causes holds the same ratio in regard to the two sexes as the statements that are published in the reports of Hospitals and the treatises upon insanity.

Having premised this, it will be worth while to examine the records of cases, to see how far these several causes have acted upon the brain of men and women, and also to examine each cause or class of causes separately, and consider how far either sex, from organization, temperament, education, habits, tastes, or position in life, is exposed to any or all of them.

We are reduced to this issue in all our inquiries whether males or females are most liable to become insane ; for, as we have no means of determining, from the nature of the disease, or from anatomical structure, which are the most readily affected with lunacy, we must inquire, which sex is most exposed to the influences that produce it, or which has the most power to resist them.

The following table, which is condensed from the Brit-

ish, Irish and American reports before quoted, includes the cases of lunacy of which the causes are stated in reference to each sex separately. It will be seen that it contains only a small proportion of those which are given in Table IV., for the reports of many Hospitals do not state the causes in reference to the sexes; some do not state them at all; and all state them for only a part of their patients, giving a very large class, often half, or even more than half, in a class of unknown causes. Table IV. includes the admissions into most of the hospitals during the whole of the period of their existence. This period varies from 92 years in St. Luke's, London, to three months in Britton Ferry. The greater proportion of them have been established within 20 years. But the reports of causes, in the Commissioners' report, cover only a period of five years, ending with 1843. In America, the reports from the Hospitals of Worcester, Mass., of Utica and Bloomingdale, N. Y., Pennsylvania, Western Virginia, Tennessee, Ohio, and Indiana only, state the causes in reference to the sexes. All these, the British, Irish and American are included in the following table:—

TABLE V.
Causes of Insanity in Males and Females.

Causes.	Males.	Females.
Intemperance,	2,290	606
Vice and sensuality, *	467	320
Masturbation, †	243	17
Connected with poverty and property,	1,396	884
Domestic trouble, grief, loss of friends, } disappointed love, &c. }	1,017	1,856
Connected with religion,	785	732
Fright,	167	261
Bodily disorders, injuries, accidents, ‡ &c.,	1,718	1,949
Injury of the head,	381	112
Excessive study, devotion to theories, specu- } lations, politics, &c. }	451	153
Physical causes, palsy, epilepsy, &c.,	1,012	745
Puerperal, lactation, &c.,		926
Hereditary, §	1,754	1,810
	<hr/> 11,686	<hr/> 10,421

* This cause, or class of causes, is given in the British, but not in the American, reports.

Among these causes, females are alone exposed to those which grow out of the uterine and mammary structure and functions. The puerperal condition, lactation, and catamenial irregularities, are then so many causes of mental disorder added to them besides those which they are liable to in common with men. In determining the comparative liability of the sexes to lunacy by statistics, all those cases among females that grow out of causes connected with the reproductive system should be deducted from the whole number of cases of female lunacy, and the remainder compared with the whole number of male lunatics. Then we should be able to compare the numbers of lunatics of the two sexes whose disorders are produced by causes connected with the organization or functions that are common to both. This would leave a balance considerably in favor of females.

Ill-health, without designation, mere invalidity or low vital power, probably including many cases of dyspepsia, constipation, &c., and other derangements arising out of bodily inactivity or want of sufficiently powerful external stimulus of action, without doubt affects females more than males, because their habits and their position in the world expose or leave them in this condition more than men. They are, therefore, more liable to become insane from this cause than males.

This inference, which seems to be naturally drawn from the comparative condition and habits of the two sexes, and

† Masturbation is in the American, but not in the British, reports. It is probably included there in the class above,—vice and sensuality.

‡ It would have been much more satisfactory to have separated these classes of causes from this connection, and put it with the class below; and then made one class of all sorts of accidents to which males are more exposed than females. But, unfortunately for this purpose, the reports of some hospitals connect them together in this manner, and render it impossible to separate them.

§ Hereditary is not stated, as a distinct and sole cause, in the American reports, except in those from Tennessee, which include 5 of each sex.

from their relative liability to low health, is rendered somewhat certain by these Hospital reports, which show that while 1,949 females, only 1,718 males, were admitted into these lunatic establishments with disorders supposed to be produced by this class of causes.

The affections and tender sensibilities are more active in woman than in man. She finds more of her happiness in them. She cultivates them with greater success. She is more easily wounded through them, and suffers with a keener anguish when they are neglected or abused, or when the expectations founded upon them are disappointed. Thus, disappointed love, sickness or death or absence of friends or kindred, abuse from married partners, misconduct of near or dear relatives, which produce no small proportion of the cases of lunacy, act more frequently upon females than upon males. The reports show that 1,856 women and 1,017 men became insane from this class of causes.

Intemperance is a very prolific source of insanity. It is plain, that very many more men than women are addicted to this vice, and by a necessary consequence, it produces more lunacy among males than among females. This is shown by the experience of Hospitals, which report 2,090 male and 606 female lunatics, from this cause.

Poverty, destitution, its reality or its fear, anxiety about business, the hopes and disappointments in regard to property, are also prolific sources of mental derangement. But they affect the sexes unequally, for the reason that men are more bent on the acquisition of wealth. They make this the business of their lives, and devote to it their minds and their hearts much more than women ; they are more engaged in those pursuits which have an uncertain issue ; they have more plans to fail, and hence they are more exposed to disappointments, and misfortunes connected with business, speculation, and money, and they suffer more when these

troubles come upon them. Their minds are therefore more frequently disturbed from these causes than the minds of females. This, which is inferred from *a priori* reasoning, is demonstrated by the records of the Asylums, which show that 1,396 males and 884 females were made insane from this whole class of causes.

It is a common opinion that females are more devoted to religion than males. This is not the place to discuss this question. It may or it may not be true. But it is also generally believed that women are more subject to religious excitements and enthusiasm,—that they are oftener fanatical and extravagant. It is, consequently, supposed that more women than men must become insane from this cause. But the experience of Asylums refutes all such opinions, and shows that while 785 males, whose insanity was chargeable to this cause, were admitted, 782 females were received whose disorder had the same origin, making, at least, nearly an equal distribution of this class of causes. But if we compare these numbers respectively, with the proportion of the two sexes who usually attend upon, and engage earnestly in, religious exercises, there will be a manifest difference in the liability of the two sexes to insanity from religion, and that in favor of the female.

Excess of study, excessive devotion to various interests and pursuits, and anxiety about political or other success, are more common among men than among women. Men are more devoted to books, and investigations, and theories. They are more ungoverned in their ambition and eagerness to accomplish their purposes of gaining knowledge or for the advancement of science. Hence we should look for more male than female lunacy from this class of causes, and the Hospital records show, that 451 males and only 153 females were thus made insane.

Fright is an important element among the causes of men-

tal derangement. Women are more timid than men; they are less acquainted with the realities of the outer world, and less used to exposures and dangers; they are more ready to imagine evil when none or little exists or is threatened. Consequently they are more frequently alarmed by imaginary danger, and more overwhelmed by real danger. It is therefore reasonable to suppose that they would become more often insane from this cause than men, and the reports state that 261 females and 167 males were made insane by fright.

The British and Irish Hospital reports show a large number of insane from vice and sensuality,—467 men and 320 women, which is a probable index of the proportionate prevalence of vice and sensuality in the two sexes.

The American Hospital reports do not state vice and sensuality as a cause, but they show 248 males and 17 females insane from masturbation, which is not mentioned in the British and Irish reports, but is probably included under the last head. This difference we might naturally infer from the difference of passion and appetite, of sensibility and of self-control in the two sexes.

Injuries of the head, and accidents of all sorts, happen to men much more frequently than to women, on account of their difference of position, and the different nature of their employments and tastes. Of course, these causes must make more males than females insane, and hence we find 381 males and 112 females reported as lunatic from this class of causes.

A class of physical causes is given in the British and Irish reports, including palsy, epilepsy, &c. I know of no reason in the nature of the sexes to suppose that one or the other would be more liable to insanity from these causes; nevertheless the British and Irish records show, that, while 1,012 men, only 745 women were made insane from them.

Hereditary taint is given as a sole and exciting cause of many cases of lunacy in the British and Irish reports.

The Tennessee Hospital only, in America, reports this as a sole cause, and this gives only five males and five females whose lunacy is from hereditary origin alone. The Americans are accustomed to consider the hereditary taint as merely a predisposing cause, which is, in itself, dormant, and only prepares the ground for some new and exciting cause, which determines the insanity. Certainly but a small proportion of those who are born of insane parentage or ancestry, and therefore inherit the tainted constitution, become insane. The most remarkable family which I have been able to investigate has had insanity in some of its members for four generations. I have learned the history of 69 members of this family. Of these, fifteen are or have been insane, one idiotic, two epileptic, three had delirium tremens, three died of brain fever, one is subject to depression of spirits and unable to attend to business a part of the time, one is subject to frequent and violent headaches, one has nervous trembling amounting almost to constant chorea, and one has low spirits. All the rest, including children, so far as I can learn, are sound. But all these cases are so distinctly referable to some new and exciting cause, that the family deny, that there is any hereditary taint in their blood.

The history of other insane families will probably show a still smaller proportion of lunatics among them.

The fair inference then is, that the Americans are right in supposing that this hereditary taint is only a predisposing cause, and remains generally, and perhaps almost universally inactive, or certainly ineffectual, until some other cause shall excite the cerebral disturbance. Of course, this cerebral disorder is more easily produced, and by a smaller cause, in those who are thus predisposed, than in other fa-

milies, whose brains are more able to endure or resist the causes of disease.

If this be true, and if the causes, or classes of causes, to which the two sexes are respectively exposed, act with equal force on the brain which is hereditarily weak, whether it be of the male or the female, then we might suppose that the numbers of the hereditarily insane in the two sexes, would be in the same proportion to each other as the numbers of those who are insane without this predisposing cause.

There were received into the British and Irish Asylums during the periods herein quoted, 44,717 male and 43,091 female lunatics from all causes; this is in the proportion of 1,870 males to 1,805 females. But the numbers stated to be hereditarily insane are 1,754 males, and 1,810 females. This shows a greater proportion of hereditary insanity among women than among men, who were sent to the Institutions in Great Britain.

Whether this is an indication, that the hereditary taint descends more to females than to males, or that this taint being equally distributed, the causes that produce insanity among women act with more efficiency on the brains naturally weak than the causes that produce insanity among men, we have no means of determining.

We have no reason to suppose that the brain of either sex is more or less able to bear any definite amount of irritating cause than the other. It is true, that there are more males than females made lunatic by intemperance, or vice and sensuality. But the explanation is, not that alcoholic stimulation, or sensual indulgence, has more effect on the brain of the male than on the brain of the female, but, that more males than females subject themselves to the influence of these causes, being more frequently intemperate and dissipated.

Masturbation, excess of study, excessive mental action in business and in politics, disappointments in speculation and in ambition, accidents, injuries of the head, &c., create more lunacy among men than among women,—not because women can bear these disturbing causes better than men, but simply because they are less exposed to them.

On the contrary, grief, disappointed affection, domestic trouble, fright, &c., produce more insanity in the female than in the male sex. It must not be inferred from these facts, that the brain of men can bear more grief, disappointment in love, domestic trouble, or fright than women, but merely, that these causes come less frequently upon them.

It may be that from something in the very nature of the sexes distinctively, the male hopes for more, and cares for more of that which he cannot always obtain, in regard to property or outward distinction, and is, therefore, more readily overwhelmed when these fail; and that the female expects more, and sets her heart upon more of that which cannot always be obtained, in regard to the affections and domestic and social enjoyments, and is, therefore, more readily cast down when these fail.

But the true reason for the greater number of male than of female lunatics from the first and second of these classes of causes, and of the greater number of female than of male lunatics from the third of these classes of causes, is similar to the reason for the greater number of males than of females who are killed by cannon and musket shot;—not because a cannon or a musket ball is more destructive to a man than to a woman, but merely because more men than women go into battle.

To the question, whether males or females are more liable to insanity, no answer can be given from the cerebral organization or functions, nor from inherited weakness.

The consideration of the causes alone can solve the question, and from these a divided answer must be given.

In as far as men, from their habits, their position, and their exposures, are more frequently intemperate; in as far as they have more of the sexual passion, and less delicacy of sensibility, and, therefore, are more given to masturbation and sensuality; in as far as they are more involved in business, and more interested in property, in politics, in schemes of aggrandizement, and in pursuit of knowledge, and are, therefore, more frequently bankrupt, or disappointed, or over-wrought with labor and anxiety; in as far as they are more employed with machinery, and with powder, or more frequently travel and go over dangerous places, or are involved in strifes and bodily quarrels, and, therefore, meet with more accidents, falls, blows on the head, &c., than women;—in as far as men are more exposed to these exciting causes of insanity, there are more male than female lunatics.

But, in as far as females have more sensibility, and stronger affections, and more active sympathies, and, therefore, suffer more intensely from grief, and loss or sickness of friends, and more from a cause almost peculiar to themselves, in the want of domestic sympathy, and in the ill-treatment of intemperate or unkind husbands or children or other kindred; in as far as females are more sedentary, and are, therefore, more frequently dyspeptic, or suffer secondary irritations from the sympathy with the reproductive system, and have, therefore, more ill-health, and inasmuch as they are more timid, and are, therefore, more exposed to fright;—in as far as these causes operate more upon women than upon men, females are more liable to insanity than males.

The general class of physical causes, including epilepsy, palsy, insolation, and often, catamenial disturbance, in the British Reports, produced a large excess of male lunacy.

In as far as this class of causes operates in Great Britain, notwithstanding some Hospital reports include uterine and mammary causes in it, men seem there to be more liable to lunacy than females.

The question resolves itself into another, that is,—which of these causes, or classes of causes, prevails the most frequently and extensively? And to this the answer must vary with various countries, and in different ages, and different states of society.

But the general answer now to be given, from the facts which present themselves from Great Britain, Ireland, France, Belgium, and America, is, that those causes of insanity which act upon males are more extensive and effective than those which act upon females, and therefore, within the periods covered by the reports which I have analyzed, and in those countries from which these reports come, males are somewhat more liable to insanity than females. But this must vary with different nations, different periods of the world, and different habits of the people.

Thus the recent investigations corroborate the general truth of what Esquirol said, twenty years ago. “The relation of insanity to the sexes varies from north to south, from nation to nation, from province to province. In Scotland, the sexes have equal proportions of lunacy. In England, there are less female than male lunatics. In the north of France, the female lunatics, and in the south of France, the male lunatics, predominate. In Naples, there are two female to one male lunatic; but in Milan, this proportion is reversed.” *

* *Annales d' Hygiene*, iv, p. 351, 2.

II. THE COMPARATIVE CURABILITY OF MALE AND FEMALE LUNATICS.

In this branch of the topic, whether insanity is the most curable in the male or in the female, we have no data to presuppose the facts. We know of no way by which we can determine, in the advance, whether the male or the female will recover most easily from lunacy.

Yet we have the record of the experience of the Asylums before quoted, from which the facts in the following table are taken.

TABLE VI.

Admissions and Recoveries in Hospitals.

No. Hospitals.	Patients admitted.*		Recovered.		Recov. per cent.	
	Males.	Fem.	Males.	Fem.	Males.	Fem.
148 English,	36,013	35,161	13,955	14,976	38.7	42.5
6 Scottish,	2,505	2,173	1,207	1,084	48.1	49.9
12 Irish,	6,213	5,752	3,311	3,351	53.2	58.2
6 French and Belgian,	1,719	1,430	710	647	41.3	45.2
17 American,	11,344	9,430	4,494	3,646	39.6	38.6
189 Hospitals,	57,794	53,946	23,677	23,704	40.6	43.9

These numbers of admissions and cures are those of the same years in regard to each Hospital. Of course, all the persons cured are not precisely those here stated to be admitted. Some were admitted into some of the Hospitals, before the reports, from which these facts are taken, began; and the cures include some of these. On the other hand, the statements of admissions include some that were yet curable, though not cured at the date of the last report. Nevertheless, the columns of admissions and cures are both for the same years in regard to each sex; and whatever error there may be in respect to

* The numbers admitted according to this Table are not exactly the same as stated in Table IV on page 147. The reports of some Hospitals state the admissions, but not the recoveries, according to sexes, and the Vermont Asylum states the sexes of the patients admitted, but not of those discharged.

one, holds equally for the other; and it is reasonable to suppose, that the cures or curability of the sexes admitted into these Hospitals, bear the same proportion to each other as these figures represent.

We see, that in the Asylums of most of the countries here quoted, the proportion of cures to the admissions, and the probable curability, is greater among females than among males, and in the English and Irish Asylums this proportion is materially larger, being an excess of 9 per cent. In France, Belgium, and Scotland, the difference is less, but still in favor of the females.

This difference will justify no very bold conclusion in regard to the curability of the sexes, but whatever inference can be drawn is in favor of women. Yet in the United States the preponderance is slightly in favor of the males.

Some inference may be drawn from the final results of special causes. Unfortunately very few have published the remote results of the causes of this disorder. The reports of the State Hospitals of Massachusetts, and of Ohio only, have noticed this fact. But taking these few data alone, we have the facts and deductions in the following Table.

TABLE VII.

Relation of Causes of Insanity to Recovery.

Causes.	Cases admitted.			Cures.	
	Worcester, 1833 to 1848.	Ohio, 1839 to 1849.	Total.	No.	Per cent. of admissions.
Ill-health, fever, measles, } puerperal, wounds, &c., }	443	392	935	588	70
Intemperance,	287	56	343	198	57
Masturbation,	158	44	202	60	29
Epilepsy,	56	52	108	12	11
Palsy,	44	. .	44	7	15
Religious,	196	75	271	197	72
Affliction, disappointments, fear, &c.,	397	196	593	318	53
Property, poverty, &c.,	129	53	182	106	58

We see, from this Table, that some of the causes, as ill-health, &c., which act more on women than on men, produce a most curable form of insanity. Under this head is puerperal mania, which is among the least permanent kinds of this disorder. And on the other hand, masturbation and epilepsy, which produce the most incurable disorder, act much more frequently on men than on women.

It may reasonably be supposed, that that derangement of the brain, which is produced and kept up by the irritation from, or sympathy with, a cause acting in another and remote organ, would be more readily cured by the removal of the active cause, than that cerebral derangement which is produced by some disorganization or exhaustion of the organ itself. If so, then the mental disorders arising out of ill-health, or disturbances of remote viscera, are more curable than those which arise out of masturbation and epilepsy, or even intemperance.

The mental disorders that grow out of afflictions, domestic troubles and disappointments, which are among the leading causes of female lunacy, seem to be somewhat more curable than those that are produced by causes connected with property, business, and poverty, which are prominent among the causes of insanity among men.

III. MORTALITY OF MALE AND FEMALE LUNATICS.

The question of the comparative mortality of male and female lunatics, must be treated and determined in the same way as the others,—by the results of experience. We have no satisfactory record of the connection of the causes of lunacy with mortality. Yet it is manifest, that in whatever class there is the largest proportion of recoveries there must be the smallest proportion of deaths.

Therefore, if there are more females than males restored out of a definite number of lunatics of each sex, there must be a smaller number of deaths of females. This is as plain as arithmetic can make it; because those who are not restored are left to die in their lunacy; and the larger the number of the uncured, the larger must be the number of deaths.

Moreover, if more of one than of the other sex are made insane by removable causes which produce curable disease, as far as these causes operate, that sex is less exposed to death in lunacy. Of course, there must be fewer deaths among the lunatics who are made so by general ill-health, than among those whose disease is produced by epilepsy or masturbation.

These deductions from causes and recoveries are substantiated by experience. Going again to the analysis of Hospital records we find the following facts:—

TABLE VIII.

Mortality of Male and Female Lunatics.

Hospitals.	Patients admitted.*		Deaths.		Ratio to admission.	
	Males.	Fem.	Males.	Fem.	Males.	Fem.
English,	36,199	35,331	8,428	5,441	23	12
Scottish,	2,505	2,173	418	252	16	11
Irish,	6,213	5,752	1,213	990	19	17
French and Belgian,	1,719	1,477	634	360	39	26
American,	11,344	9,430	1,612	1,104	14	11
Total,	57,980	54,163	12,311	8,147	21	15

This Table corroborates the inference which might be naturally drawn from the statements and arguments in the two preceding branches of this subject,—that females are less liable to death than males while insane.

* See note to Table VI page 164.

IV. MORTALITY OF MALES AND FEMALES FROM ALL DISEASES OF THE BRAIN AND NERVOUS SYSTEM.

The inferences drawn in each of the preceding parts of this report,—that males are somewhat more frequently attacked with insanity,—that they are less curable when insane,—and that they are more liable to death in their lunacy than females,—finds an indirect corroboration in the records of general mortality.

I have analyzed the Registration Reports of Deaths, for various years, of England and Wales, of Massachusetts, of the State of New York, the city of New York and of Philadelphia.* These in all years publish the causes of deaths, but they do not always distinguish the sexes. But these mortuary registers, in those years in which they specify both the diseases and the sexes, report the deaths of 2,169,875 persons, including 1,103,198 males and 1,066,677 females; of whom 326,072 died of diseases of the brain and the nervous system. It might be supposed, that these cerebral and nervous diseases would be distributed equally between the sexes, or at least in due proportion to the whole number of deaths, or to the numbers of the living in each sex. But so far from this, 178,255 males, and only 147,817 females, died of neurotic disorders. Comparing these with the total deaths from all causes, we see that 16.15 per cent. of male deaths, and only 13.85 per cent. of female deaths, were produced by this class of diseases.

The following facts were condensed from the reports

* Reports of the Registrar General, for five years and a half,—1837 to 1842. —Registration of Births, Marriages, and Deaths, of Massachusetts, for four years,—1845 to 1848. —Do. of the State of New York, for two years,—1847 and 1848. —Inspector's Returns of the city of New York, for ten years,—1838 to 1848, except 1843. —Bills of Mortality of Philadelphia, for twelve years,—1835 to 1846.

above-mentioned, from countries, states, and cities, containing 9,396,835 males, and 9,174,107 females.

TABLE IX.

Mortality of Males and Females from Diseases of the Brain and Nervous System.

Diseases of the brain and nervous system.	Deaths.		Ratio, in each sex.		To 1,000,000 living	Fem.
	Males.	Fem.	To 10,000 deaths.	Fem.		
Insanity,	1,371	1,277	12.4	11.9	145	120
Epilepsy,	4,097	3,481	37	32	425	357
Apoplexy, compression, } congestion,	19,927	17,979	180	168.5	2,120	1,844
Palsy,	15,807	17,134	143	160.5	1,692	1,757
Inflammation, brain and } nervous fevers,	10,651	8,754	96	82	1,133	898
Convulsions,	86,433	68,905	783	645.9	9,198	7,068
Hydrocephalus,	30,396	24,444	275	229	3,234	2,507
Chorea,	64	142	.5	1.3	.6	1.4
Delirium tremens,	2,593	398	23	3.7	275	48
Tetanus,	744	223	6	2	79	22
Hydrophobia,	68	27	.6	.1	7	2
Diseases of the brain } and head,	6,104	5,053	55	47	649	518
All diseases of brain and } nerves,	178,255	147,817	1,615	1,385	1,893.9	1,529.4

Some of these diseases are almost exclusively those of childhood, and others of manhood. It is well, therefore, to compare these deaths with the number of the living in those periods of life at which these diseases are most usually fatal.

TABLE X.

Ratio of Mortality of Males and Females to living of each sex.

Diseases.	Numbers exposed.	Period of life.	Deaths.	
			Males.	Fem.
Apoplexy,	in 1,000,000 living,	over 30	6,005	5,173
Palsy,	" " "	"	4,763	4,930
Convulsions,	" " "	under 10	35,179	27,987
Hydrocephalus,	" " "	"	12,369	9,927

It would naturally be supposed, that more males than females would die of delirium tremens, hydrophobia, and

tetanus, on account of their habits, and exposures to accidents and rabid animals.

Perhaps a part, at least, of the excess of male deaths over the female deaths from apoplexy and congestion of the brain may be attributed to the more active cerebral action, and the accidents of men.

The excess of deaths of females from palsy over those of males must be, in part, ascribed to the excess of female population in the advanced ages at which this disease generally occurs.

But the excess of 22 per cent. of deaths from convulsions, and 24 per cent. from hydrocephalus, of males over the deaths of females from the same causes, is not what we were prepared to expect, nor can I find any explanation of the causes of these last differences.

It is not a little remarkable, that in these registries every one of the diseases of the brain and nervous system, all of those which come under the class of neuroses in the nosologies, except palsy and chorea, were more fatal to men than to women, when compared with the whole number of deaths, and with the numbers of living of each sex. And therefore this registration of general mortality, as far as it goes, shows that the female is much less liable to death, from nervous disorders at least, than the male.

We have no means of judging of the curability of these nervous disorders in the two sexes. Not knowing the number of persons attacked with them, we cannot compare the successful with the fatal issue, and thus ascertain the relative violence of the diseases upon the two sexes, when they come upon them.

Nevertheless, there is an agreement between this record of mortality from all disorders of the brain and nerves, and the record of the experience of Hospitals for the Insane. They combine together to overthrow the

common notion that woman especially is subject to nervous disorders, and that man is comparatively exempt from them; and more than this, they show that the reverse is true,—that man is more exposed to, is less frequently cured of, and falls more under the attacks of this class of diseases than woman.

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